

Title (en)  
SUBSTRATE PROCESSING APPARATUS

Title (de)  
SUBSTRATVERARBEITUNGSVORRICHTUNG

Title (fr)  
APPAREIL DE TRAITEMENT DE SUBSTRAT

Publication  
**EP 3510633 A1 20190717 (EN)**

Application  
**EP 17768909 A 20170905**

Priority  
• US 201662385150 P 20160908  
• US 201715693871 A 20170901  
• US 2017050085 W 20170905

Abstract (en)  
[origin: US2018068881A1] A substrate processing apparatus including a frame and at least one substrate transport arm having at least one end effector, each end effector having a base portion, a first and second substrate support tines mounted to and dependent from the base portion where at least one of the first and second substrate support tines is movable relative to the base portion, each of the first and second substrate support tines having respective substrate contacts configured to contact and support a substrate held by the end effector between the respective contacts of the first and second substrate support tines at a substrate support seat dimension span between the substrate contacts of the first and second substrate support tines, and an end effector drive section configured to vary a distance between the first and second substrate support tines relative to each other on the fly.

IPC 8 full level  
**H01L 21/67** (2006.01); **H01L 21/677** (2006.01); **H01L 21/687** (2006.01)

CPC (source: EP KR US)  
**H01L 21/67265** (2013.01 - KR US); **H01L 21/67271** (2013.01 - KR US); **H01L 21/67276** (2013.01 - EP KR US);  
**H01L 21/67727** (2013.01 - EP KR US); **H01L 21/67766** (2013.01 - KR US); **H01L 21/67778** (2013.01 - KR US);  
**H01L 21/68707** (2013.01 - EP KR US); **H01L 21/68742** (2013.01 - KR US); **H01L 21/6875** (2013.01 - KR US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**US 10607879 B2 20200331**; **US 2018068881 A1 20180308**; CN 109923657 A 20190621; CN 109923657 B 20240202;  
CN 118073255 A 20240524; EP 3510633 A1 20190717; EP 3510633 B1 20230531; JP 2019530225 A 20191017; JP 2023036835 A 20230314;  
JP 7263638 B2 20230425; KR 102554372 B1 20230711; KR 20190046987 A 20190507; KR 20230045113 A 20230404;  
TW 201820506 A 20180601; TW I750220 B 20211221; WO 2018048802 A1 20180315

DOCDB simple family (application)  
**US 201715693871 A 20170901**; CN 201780069173 A 20170905; CN 202410048243 A 20170905; EP 17768909 A 20170905;  
JP 2019513363 A 20170905; JP 2022207652 A 20221223; KR 20197010079 A 20170905; KR 20237010899 A 20170905;  
TW 106130450 A 20170906; US 2017050085 W 20170905